

PATENT  
Application # 10/042,143  
Attorney Docket # 2000-0672A (1014-200)

## AMENDMENTS

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## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for providing access to a communications medium, the communications medium being suitable for allowing use of a plurality of Home Phoneline Network Association (HPNA) v2 (HPN) frames, the method comprising steps of:

transmitting a sequence of the plurality of blocking Home Phoneline Network frames on the communications medium, each blocking frame pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17  $\mu$ sec, the IFG comprising a blocking signal adapted to prevent an HPNA v2 (v2 STA) station from recognizing the IFG, said IFG not recognized by an HPNA v2 station (STA) as a duration defined by an HPNA v2 specification for an HPNA IFG;

transmitting a message from a Media Control Station (MC STA) to at least one selected non-Media Control Station (non-MC STA) when the Home Phoneline Network blocking frames are transmitted; and

receiving a reply message to the transmitted message at the MC STA from a selected non-MC STA when the Home Phoneline Network blocking frames are transmitted.

2. (Cancelled)

3. (Currently Amended) The method according to claim 1, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a Blocking Frame Type field.

4. (Previously Presented) The method according to claim 3, wherein information contained in the Blocking Frame Type field identifies a frame type that is known to the v2 STA.

5. (Previously Presented) The method according to claim 3, wherein information

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contained in the Blocking Frame Type field identifies a frame type that is unknown to the v2 STA.

6. (Currently Amended) The method according to claim 1, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames is assigned a highest HPNA v2 priority available in an HPNA v2 frame.

7. (Currently Amended) The method according to claim 1, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a scrambler initialization field having a fixed length.

8. (Currently Amended) The method according to claim 1, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a scrambler initialization field having a variable length.

9. (Currently Amended) The method according to claim 1, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a payload encoding field.

10. (Previously Presented) The method according to claim 9, wherein each payload encoding field includes information that is known to the v2 STA.

11. (Previously Presented) The method according to claim 9, wherein each payload encoding field includes information that is unknown to the v2 STA.

12. (Currently Amended) A method for providing access to a communications medium, the communications medium being suitable for allowing use of a plurality of Home Phoneline Network Association-(HPNA)-v2-(HPN) frames, each HPNA-v2-HPN frame being timed to allow a plurality of physical layer priority level slots, the method comprising steps of:

~~transmitting a sequence the plurality of blocking Home Phoneline Network frames on~~  
the communications medium, each ~~blocking frame pair of Home Phoneline Network frames~~ having timing to allow an Inter-Frame Gap (IFG) ~~having a duration of less than 17  $\mu$ sec, the IFG comprising~~

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~~a blocking signal, said IFG not recognized by an HPNA v2 station (STA) as a duration defined by an HPNA v2 specification for an HPNA IFG the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG;~~

transmitting a message from a Media Control Station (MC STA) to at least one selected non-Media Control Station (non-MC STA) when the Home Phoneline Network blocking frames are transmitted, the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame; and

receiving a reply message to the transmitted message at the MC STA from the selected non-MC STA when the Home Phoneline Network blocking frames are transmitted.

13. (Cancelled)

14. (Currently Amended) The method according to claim 12, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a Blocking Frame Type field.

15. (Previously Presented) The method according to claim 14, wherein information contained in the Blocking Frame Type field identifies a frame type that is known to the v2 STA.

16. (Previously Presented) The method according to claim 14, wherein information contained in the Blocking Frame Type field identifies a frame type that is unknown to the v2 STA.

17. (Currently Amended) The method according to claim 12, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames is assigned a highest HPNA v2 priority that is available in the HPNA v2 frame.

18. (Currently Amended) The method according to claim 12, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a scrambler initialization field having a fixed length.

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19. (Currently Amended) The method according to claim 12, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a scrambler initialization field having a variable length.

20. (Currently Amended) The method according to claim 12, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a payload encoding field.

21. (Previously Presented) The method according to claim 20, wherein each payload encoding field includes information that is known to the v2 STA.

22. (Previously Presented) The method according to claim 21, wherein each payload encoding field includes information that is unknown to the v2 STA.

23. (Currently Amended) A communication network, comprising:  
a communications medium that is suitable for allowing use of a plurality of Home Phoneline Network Association (HPNA) v2 (HPN) frames; and  
a communications signal in the communications medium having a sequence ~~the~~ plurality of blocking Home Phoneline Network frames, each blocking frame pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17  $\mu$ sec, the IFG comprising a blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the existence of the IFG, said IFG not recognized by an HPNA v2 station (STA) as a duration defined by an HPNA v2 specification for an HPNA IFG; and  
a Media Control Station (MC STA) transmitting a message to at least one selected non-Media Control Station (non-MC STA) during the Home Phoneline Network blocking frames, and receiving a reply message in response to the transmitted message from the non-MC STA during the Home Phoneline Network blocking frames.

24. (Cancelled)

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25. (Currently Amended) The communications network according to claim 23, wherein each blocking frame comprised by the sequence of Home Phoneline Network frames includes a Blocking Frame Type field.

26. (Previously Presented) The communications network according to claim 23, wherein information contained in a Blocking Frame Type field identifies a frame type that is known to the v2 STA.

27. (Previously Presented) The communications network according to claim 23, wherein information contained in a Blocking Frame Type field identifies a frame type that is unknown to the v2 STA.

28. (Currently Amended) The communications network according to claim 23, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames is assigned a highest HPNA priority available in an HPNA v2 frame.

29. (Currently Amended) The communications network according to claim 23, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a scrambler initialization field having a fixed length.

30. (Currently Amended) The communications network according to claim 23, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a scrambler initialization field having a variable length.

31. (Currently Amended) The communications network according to claim 23, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a payload encoding frame.

32. (Currently Amended) The communications network according to claim 31, wherein ~~each~~ the payload encoding frame includes information that is known to the v2 STA.

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33. (Previously Presented) The communications network according to claim 31, wherein each payload encoding frame includes information that is unknown to the v2 STA.

34. (Currently Amended) A communication network, comprising:  
a communications medium that is suitable for allowing use of a plurality of Home Phoneline Network Association (HPNA)-v2 (HPN) frames, each HPNA-v2 (HPN) frame being timed to allow a plurality of physical layer priority level slots; and

a communications signal in the communications medium having a sequence of the plurality of ~~blocking~~ Home Phoneline Network frames, each ~~blocking frame~~ pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG) ~~having a duration of less than 17  $\mu$ sec, the IFG comprising a blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG, said IFG not recognized by an HPNA v2 station (STA) as a duration defined by an HPNA v2 specification for an HPNA IFG; and~~

a Media Control Station (MC STA) transmitting a message to at least one selected non-Media Control Station (non-MC STA), the transmitted message being transmitted with a highest physical layer priority level available in each HPNA v2 frame and during the Home Phoneline Network blocking frames, the MC STA receiving a reply message in response to the transmitted message from the non-MC STA during the Home Phoneline Network blocking frames.

35. (Cancelled)

36. (Currently Amended) The communications network according to claim 34, wherein each blocking frame comprised by the of Home Phoneline Network frames includes a Blocking Frame Type field.

37. (Previously Presented) The communications network according to claim 34, wherein information contained in a Blocking Frame Type field identifies a frame type that is known to the v2 STA.

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38. (Previously Presented) The communications network according to claim 34, wherein information contained in a Blocking Frame Type field identifies a frame type that is unknown to the v2 STA.

39. (Currently Amended) The communications network according to claim 34, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames is assigned a highest HPNA priority that is available in an HPNA v2 frame.

40. (Currently Amended) The communications network according to claim 34, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a scrambler initialization field having a fixed length.

41. (Currently Amended) The communications network according to claim 34, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a scrambler initialization field having a variable length.

42. (Currently Amended) The communications network according to claim 34, wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a payload encoding frame.

43. (Previously Presented) The communications network according to claim 42, wherein each payload encoding frame includes information that is known to the v2 STA.

44. (Previously Presented) The communications network according to claim 42, wherein each payload encoding frame includes information that is unknown to the v2 STA.

45. (Withdrawn) A Media Controller station (MC STA) for a communications network having a communications medium, the communications medium being suitable for allowing use of a plurality of Home Phoneline Network Association (HPNA) v2 frames, the MC STA comprising:  
a QoS (Quality of Service) management entity (QME) receiving at least one end-to-

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end QoS message characterizing a user application, the at least one end-to-end QoS message including at least one QoS parameter set that is expressed at a layer that is higher than the Media Access Control (MAC) sublayer of an HPNA v2 network and is to be passed down to the MAC sublayer of the MC STA for enabling QoS traffic transport of the application;

an admission control entity (ACE) performing a centralized admission control decision relating to the application based on the at least one end-to-end QoS message characterizing the application; and

the MC STA transmitting a communications signal in the communications medium having a sequence of blocking frames, each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17  $\mu$ sec, said IFG not recognized by an HPNA v2 station (STA) as a duration defined by an HPNA v2 specification for an HPNA IFG, the MC STA further transmitting a message to at least one selected non-MC STA using the communications medium, the transmitted message being transmitted during the blocking frames, and the MC STA receiving a reply message in response to the transmitted message from a non-MC STA during the blocking frames.

46. (Withdrawn) The MC STA according to claim 45, wherein the duration of each IFG between blocking frames is less than about 17  $\mu$ sec.

47. (Withdrawn) The MC STA according to claim 45, wherein each blocking frame includes a Blocking Frame Type field.

48. (Withdrawn) The MC STA according to claim 45, wherein information contained in the Blocking Frame Type field identifies a frame type that is known to a v2 STA.

49. (Withdrawn) The MC STA according to claim 45, wherein information contained in the Blocking Frame Type field identifies a frame type that is unknown to a v2 STA.

50. (Withdrawn) The MC STA according to claim 45, wherein each blocking frame is assigned a highest HPNA priority that is available in an HPNA v2 frame.



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51. (Withdrawn) The MC STA according to claim 45, wherein each blocking frame includes a scrambler initialization field having a fixed length.

52. (Withdrawn) The MC STA according to claim 45, wherein each blocking frame includes a scrambler initialization field having a variable length.

53. (Withdrawn) The MC STA according to claim 45, wherein each blocking frame includes a payload encoding frame.

54. (Withdrawn) The MC STA according to claim 53, wherein each payload encoding frame includes information that is known to a v2 STA.

55. (Withdrawn) The MC STA according to claim 53, wherein each payload encoding frame includes information that is unknown to a v2 STA.

56. (Withdrawn) The MC STA according to claim 45, wherein each HPNA v2 frame is timed to allow a plurality of physical layer priority level slots, and  
wherein the transmitted message is transmitted with a highest physical layer priority level available in the HPNA v2 frame and during the blocking frames.